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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/644,290

08/19/2003

Chang-Lung Kang

B-5208 621170-6

5796

36716

7590

11/16/2004

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EXAMINER:

TRAN, THUY V


ART UNIT

PAPER NUMBER

2821

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/644,290	KANG ET AL.	
	Examiner	Art Unit	
	Thuy V. Tran	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23 is/are rejected.
- 7) ☒ Claim(s) 1-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09/14/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a response to the Applicants' filing on 08/19/2003. In virtue of this filing, claims 1-23 are currently presented in the instant application.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Inventorship

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 09/14/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

4. The drawings submitted on 08/19/2003 are accepted.

Specification Objections

5. The abstract of the disclosure is objected to because it includes a run-on sentence:

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Line 1 of the abstract, “. The system comprises” should be changed to --includes--.

Correction is required. See MPEP § 608.01(b).

6. The specification of the disclosure is objected to because it contains a typographical error:

Page 5, line 4, “coil” (second occurrence) should be changed to --core-- (for terminology consistency).

Appropriate correction is required.

Claim Objections/ Minor Informalities

7. Claims 1, 4-5, 7, 9-12, 15-17, and 23 are objected to because of the following informalities:

Claim 1, line 5, --coil set-- should be inserted between “second” and “and”; and --a-- should be inserted between “and” and “third”;

Claim 1, line 10, “the” (first occurrence) should be deleted;

Claim 1, line 12, --lamp-- should be inserted between “first” and “and”; and --a-- should be inserted between “and” and “second”;

Claim 4, line 3, --lamp-- should be inserted between “first” (second occurrence) and “and” (third occurrence); and --the-- should be inserted after “and” (third occurrence);

Claim 5, line 3, --capacitor-- should be inserted between “first” (first occurrence) and “and”; and --a-- should be inserted between “and” and “second”;

Claim 7, line 3, “the” (first occurrence) should be deleted;

Claim 7, line 5, “the” (first occurrence) should be deleted;

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Claim 9, line 3, --a source, -- should be inserted between “having” and “a” (second occurrence);

Claim 9, line 6, --a source, -- should be inserted between “having” and “a” (second occurrence);

Claim 9, line 10, --diode-- should be inserted between “first” and “and”; and --a-- should be inserted between “and” and “second”;

Claim 9, line 11, --the-- should be inserted between “and” (first occurrence) and “drain”;

Claim 10, line 2, --coil set-- should be inserted between “first” and “and” (first occurrence); and --the-- should be inserted between “and”(first occurrence) and “fifth”;

Claim 11, line 3, “the” (first occurrence) should be deleted;

Claim 11, line 5, “the” (first occurrence) should be deleted;

Claim 11, line 6, “set” (first and second occurrences) should be changed to --sets--;

Claim 12, line 5, “a” (second occurrence) should be changed to --the--;

Claim 15, line 3, “the” (first occurrence) should be deleted;

Claim 15, line 5, “the” (first occurrence) should be deleted;

Claim 16, line 2, --lamp-- should be inserted between “first” and “and”; and --the-- should be inserted after “and”;

Claim 17, line 9, “the” (second occurrence) should be deleted; and

Claim 23, line 7, “the” should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Chou et al. (U.S. Patent No. 6,104,146).

With respect to claim 23, Chou et al. discloses, in Fig. 1, a transformer [T1] for multi-lamp backlight system comprising (1) a core [T1], (2) a first coil set [N3] wrapped around the core [T1] and, (3) a second and third coil sets [N1, N2] wrapped around the core [T1] and respectively disposed on two sides of the first coil set [N3], wherein numbers of coils of the second [N1] and third coil [N2] sets are substantially the same (see Fig. 1).

Allowable Subject Matter

10. Claims 1-22 would be allowed altogether if claims 1, 4-5, 7, 9-12, and 15-17 were corrected to overcome the objections set forth in this Office Action.

11. The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to disclose or fairly suggest:

- A multi-lamp backlight system comprising a second coil set and a third coil set wrapped around the core and respectively disposed on two sides of the first coil set, on which a second and a third AC voltage are induced by the first voltage signal applied to the first coil set respectively, wherein numbers of coils of the second and third coil sets are substantially the same, in combination with the remaining claimed

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limitations as called for in independent claim 1 (claims 2-16 would also be allowed since they are dependent on claim 1); and

- A multi-lamp backlight system comprising a plurality of second coil sets wrapped around the core and symmetrically disposed on two sides of the first coil set, on each of which a second AC voltage is induced by the first voltage signal applied to the first coil set, wherein numbers of coils of the second coil sets are substantially the same, in combination with the remaining claimed limitations as called for in independent claim 17 (claims 18-22 would also be allowed since they are dependent on claim 17).

Citation of relevant prior art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Lin et al. (U.S. Patent No. 6,717,372) discloses a multi-lamp driving system.

Prior art Oura et al. (U.S. Patent No. 6,515,427) discloses an inverter for multi-lamp backlight system.

Prior art Chang (U.S. Patent No. 6,310,444) discloses a multi-lamp driving system.

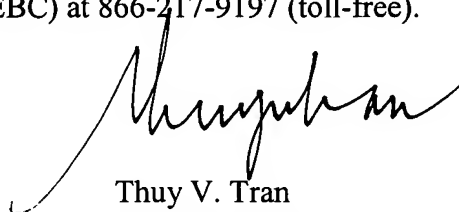
Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Thuy V. Tran', is positioned above the printed name and title.

Thuy V. Tran
Primary Examiner
Art Unit 2821

11/14/2004